UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,871	12/29/2000	Yunus Mohammed	M61.12-0334	8553

7590 09/15/2004	**EXAMINER**
Joseph R. Kelly	OPSASNICK, MICHAEL N
WESTMAN, CHAMPLIN & KELLY, P.A.	

ART UNIT	PAPER NUMBER
2655	

Suite 1600 - International Centre
900 Second Avenue South
Minneapolis, MN 55402-3319

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *29 December 2000*.
2a) ☐ This action is **FINAL**.　　　2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-31* is/are pending in the application.
　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-31* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
　　a) ☐ All　b) ☐ Some * c) ☐ None of:
　　　1. ☐ Certified copies of the priority documents have been received.
　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.
　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/16/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Burrows

(6021409).

As per claims 1,27, Burrows (6021409) teaches:

"receiving a word list......word list" as receiving word list from paring module

containing words as well as their contents (col. 6 lines 60-67)

"selecting word from the word list" as choosing the word (col. 11 lines 14-16)

"generating an index......word" as index corresponding to the word (col. 11 lines

4-7)

"encoding the selected word......data" as encoding the words (col. 12 lines 50-63;

col. 14 lines 48-55)

"writing the encoded word......memory" as storing the entries (col. 12 lines 50-67) .

As per claim 2, Burrows (6021409) teaches:

"repeating the steps.....data" as feedback loop for the next word (fig. 2, subblock

59, back to subblock 130, to repeat the page and parsing module) ›

As per claims 3,22,26,30, Burrows (6021409) teaches:

"writing the codebooks....lexicon memory" as stored data structure with an index

format and pointer (col. 13 lines 24-32, lines 45-51) can be considered as a codebook.

As per claim 4, Burrows (6021409) teaches:

"counting the words....word list" as using hash encoding to evenly distribute over

the buckets (col. 14 lines 48-55) ,

As per claim 5, Burrows (6021409) teaches:

"determining....memory" as using index and pointers for the next available

locations (col. 13 lines 45-50) ₃

As per claim 6, Burrows (6021409) teaches:

"calculating.....hash table" as using hash encoding to evenly distribute over the

buckets (col. 14 lines 48-55; and Figs. 9 and 10)).

As per claim 7, Burrows (6021409) teaches:

"writing an offset.....memory" as computing a delta value as an offset (col. 11
line 65 – col. 12 line 6).

As per claim 8, <u>Burrows (6021409)</u> teaches:

"providing...word encoders" as compressing the word entries based on delta
values (col. 11 line 40 – col. 12 line 26; encoding)

"providing....data encoders" as word list with domains such as attributes, and
encoding based on that information (col. 9 lines 21-29).

As per claim 9, <u>Burrows (6021409)</u> teaches Huffman coding (col. 12 lines 45-47),

As per claims 10,27, <u>Burrows (6021409)</u> teaches:

"writing a data structure.....dependent data" as hash encoding used (col. 14 lines
48-58) including content (col. 7 lines 58-63; col. 8 lines 19-26)

"wherein each word dependent data portion....portion" as indicating the word an
location pairs (including content -- col. 7 line 65 – col. 8 line 53).

As per claim 11, <u>Burrows (6021409)</u> teaches:

"writing a data structure....separator" as words and their representations have a
separator (col. 6 lines 56-67),

As per claim 12, <u>Burrows (6021409)</u> teaches:

"receiving the word....word information" as searching the index, accessing and

decoding (col. 5 lines 15-35, and col. 6 lines 17-42) .

As per claim 13, <u>Burrows (6021409)</u> teaches:

"prior to reading......word" as verifying the candidate for the query (col. 6 lines

34-37) ,

As per claim 14, <u>Burrows (6021409)</u> teaches:

"reading a plurality.....information" as reading words as well as marks (col. 7

lines 13-23) .

As per claims 15,21,28, <u>Burrows (6021409)</u> teaches:

"plurality of fields.....associated field" as reading the attributes (Col. 9 lines 21-

29) .

As per claims 16,21,25,29, <u>Burrows (6021409)</u> teaches:

"reading a last field....received word" as reading a zero to indicate the end of the

encoding (col. 12 lines 13-15).

As per claim 17, <u>Burrows (6021409)</u> teaches:

"initializing......information" as initializing the readers for each searched word

(col. 20 lines 52-67) ,

As per claim 18, <u>Burrows (6021409)</u> teaches:

"calculating a hash value....lexicon" as using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and 10)).

As per claims 19,23, <u>Burrows (6021409)</u> teaches:

"a compressed lexicon.....builder" as word list with domain such as attributes (Col. 9 lines 21-29)

"a plurality of domain encoders....data" as compressing the word entries based on delta values (Col. 11 line 40 – col. 12 line 26)

"a hashing component.....word list" as using index and pointers for the next available locations (col. 13 lines 45-50)

"a hash table generator.....lexicon memory" as using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and 10)).

"a lexicon memory....word" as using index and pointers for the next available locations (col. 13 lines 45-50);using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and 10)) and computing a delta value as an offset (col. 11 line 65 – col. 12 line 6).

As per claims 20,24, <u>Burrows (6021409)</u> teaches:

"lexicon memory generator....memory" as words and their representations have a separator (col. 6 lines 56-67).

As per claim 31, <u>Burrows (6021409)</u> teaches an index and pointer tied in with the word

portions as using index and pointers for the next available locations (col. 13 lines 45-50) and

using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and

10)).

Conclusion

3.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.   Please see related art listed on the PTO-892 form.

4.   **Any response to this action should be mailed to:**

> Commissioner of Patents and Trademarks
> Washington, D.C. 20231
> **or faxed to:**
> (703) 872 9314,
> (for informal or draft communications, please label "PROPOSED" or "DRAFT")
> Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
> Arlington. VA., Sixth Floor (Receptionist).

5.   Any inquiry concerning this communication or earlier communications from the examiner should
be directed to Michael Opsasnick, telephone number (703)305-4089, who is available Tuesday-Thursday,
9am-4pm.
      If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms.
Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9306.
      Any inquiry of a general nature or relating to the status of this application or proceeding should be
directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer
Service telephone number is (703) 306-0377.
      Information regarding the status of an application may be obtained from the Patent Application
Information Retrieval (PAIR) system. Status information for published applications may be obtained from
either Private PAIR or Public PAIR. Status information for unpublished applications is available through
Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should
you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at
866-217-9197 (toll-free).

mno
9/8/2004

SUSAN MCFADDEN
PRIMARY EXAMINER